

REMARKS

I. General

Claims 1-20 are pending; claims 13 and 20 are amended; claims 21-25 are newly presented for consideration.

Claims 1-20 stand rejected under 35 U.S.C. § 101.

Claims 1-5 and 18 stand rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,292,909 (hereinafter *Hare*) in view of U.S. Patent Application Publication No. 2003/0156549 (hereinafter *Binder*).

Claims 6-10 and 19 stand rejected under 35 U.S.C. § 103(a) over *Hare* in view of *Binder* and U.S. Patent No. 6,625,648 (hereinafter *Schwaller*).

Claims 11-16 stand rejected under 35 U.S.C. § 103(a) over *Hare* in view of *Binder* and “UML-Based Integration Testing” (*available at* <http://www4.informatik.tu-muenchen.de/publ/papers/meisinge00.pdf>, hereinafter *Hartman*).

Claims 17 and 19-20 stand rejected under 35 U.S.C. § 103(a) over *Hare* in view of *Binder*, *Schwaller*, and *Hartman*. Applicant notes the rejection of claims 17 and 19-20 over *Hare*, *Binder* and *Hartman* incorporates reasoning relying upon *Schwaller*. Thus, Applicant has interpreted the rejection of claims 17 and 19-20 over *Hare* in view of *Binder* and *Hartman* as being over *Hare* in view of *Binder*, *Schwaller*, and *Hartman*.

II. Examiner Interview

Applicant hereby makes record of voice correspondence between Applicant’s representative (Benjamin King, reg. no. 57,345) and the Examiner, which were conducted on August 7, 2007 (via voicemail) and on August 14, 2007 (via telephone). The matters discussed are as follows. The OA referred to “Smaalders” as teaching various features and limitations of claim 19, but the OA did not resolve the Smaalders reference (i.e., it did not provide a patent

number, patent application publication number, or the like). OA p.10. In response, the Examiner proposed to remove the Smaalders reference and, in effect, base the rejection of claim 19 on the rejection of claims 1, 6, 11, and 12, which is hereby accepted by Applicant.

III. Amendments to the claims

Claims 13 and 20 are amended to correct cosmetic error found by Applicant.

Claim 21 is newly presented for consideration and recites “a plurality of agents at the plurality of test locations, wherein the software modules are operable to access a data store of the agents.” It is believed the cited art does not teach these limitations, at least because *Hare* fails to teach software modules accessing a data store of an agent. Support for this amendment may be found in at least Specification paragraph [0024]. No new matter has been entered.

Claim 22 is newly presented for consideration and recites “wherein the software modules performing the test of the network report a ‘test failed’ at the outset, and change the result to success only if all the tests applied by the module succeed. It appears that the cited art does not teach or suggest these features. Support for this amendment may be found in at least Specification paragraph [0025]. No new matter has been entered.

Claim 23 is newly presented for consideration and recites “wherein the graphical model is viewed as a multi-branch hierarchical tree and dotted arrows show co-ordination points between the flows.” It appears that the cited art does not teach or suggest these features. Support for this amendment may be found in at least Specification paragraphs [0036]-[0037]. No new matter has been entered.

Claim 24 is newly presented for consideration and recites “wherein the software modules comprise a send email module and a receive email module.” It appears that the cited art does not teach or suggest these features. Support for this amendment may be found in at least Specification paragraph [0040]. No new matter has been entered.

Claim 25 is newly presented for consideration and recites “wherein the receive email module uses unique identifying information about an email to select the email from a plurality of received emails.” It appears that the cited art does not teach or suggest these features. Support for this amendment may be found in at least Specification paragraph [0040]. No new matter has been entered

IV. First ground of rejection – under 35 U.S.C. § 101

Claims 1-20 stand rejected under 35 U.S.C. § 101 allegedly for being directed to non-statutory subject matter. Applicant respectfully disagrees and hereby traverses the rejection.

A. Claims 1-19

The OA states claims 1, 3, and 17-19 “are directed to software per se, which is not a product of manufacture.” To the contrary, Applicant respectfully notes that each of claims 1, 3, and 17-19 is directed towards an “apparatus” and not “software per se.” Thus, Applicant respectfully asserts that claims 1, 3, and 17-19 are directed towards statutory subject matter. Therefore, Applicant respectfully requests that the rejection be withdrawn.

Claims 2 and 4-16 stand rejected at least for their dependence on rejected base claims. Claims 2 and 4-16 each depend from and further narrow the scope of one of claims 1 or 3. As discussed above, claims 1 and 3 are directed towards statutory subject matter. Thus, claims 2 and 4-16 are directed towards statutory subject matter. Therefore, Applicant respectfully requests that the rejection be withdrawn.

B. Claim 20

Claim 20 stands rejected under 35 U.S.C. § 101 allegedly for being directed to non-statutory subject matter. The OA states claim 20 is “directed to software per se” and that the claim limitations “do not embody a tangible, physical structure in such a manner as to enable the software to act as a computer component and realize any functionality.” To the contrary, Applicant respectfully notes that claim 20 is directed towards a “computer readable medium

comprising” sets of instructions. Thus, claim 20 embodies a tangible, physical structure (the claim’s “computer readable medium”) that enables the claim’s sets of instructions to act as a computer component and realize the functionality within the sets of instructions. Thus, Applicant respectfully asserts that claim 20 is directed towards statutory subject matter. Therefore, Applicant respectfully requests that the rejection be withdrawn.

V. Second ground of rejection – under 35 U.S.C. § 103(a) over *Hare* in view of *Binder*
Claims 1-5 and 18 stand rejected under 35 U.S.C. § 103(a) over *Hare* in view of *Binder*.
Applicant hereby traverses the rejection.

A. Claims 1-2

It is well settled that in order to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Claim 1 recites “the graphical model including flows respectively corresponding to test locations.” The cited art fails to teach these limitations because the cited art does not teach “flows respectively corresponding to test locations.” The OA appears to interpret *Hare*’s MIB test case sets 56 as meeting these limitations. *See* OA pp. 3-4 (citing to *Hare* Figure 2 and col. 4, ll. 27-55). Applicant respectfully disagrees, noting that *Hare* merely teaches that MIB test case sets 56 comprise MIB test cases 54, yet is silent to MIB test case sets 56 corresponding to any form of “test locations.” Merely teaching test case sets, without more, is not enough to teach or suggest test locations. Thus, it is believed that *Hare* does not teach or suggest “flows respectively corresponding to test locations.” *Binder* is not relied upon nor do its cited portions teach such limitations. Hence, the combination fails to teach “flows respectively corresponding to test locations.” Thus, the cited art does not teach or suggest all claim limitations. Therefore, Applicant respectfully requests the withdrawal of the rejection.

Claim 2 depends from an inherits all the features of claim 1. As discussed above, there are differences between the cited art and claim 1. Thus, there are differences between the cited art and claim 2. Therefore Applicant respectfully requests that the rejection be withdrawn.

B. Claim 3-5

Claim 3 recites “the graphical model including flows respectively corresponding to test locations.” The cited art fails to teach these limitations because the cited art does not teach “flows respectively corresponding to test locations.” The OA appears to interpret *Hare*’s MIB test case sets 56 as meeting these limitations. *See* OA p.5 (referring to the reasoning of the rejection of claim 1 at OA pp. 3-4 (citing to *Hare* Figure 2 and col. 4, ll. 27-55)). Applicant respectfully disagrees, noting that *Hare* merely teaches that MIB test case sets 56 comprise MIB test cases 54, yet is silent to MIB test case sets 56 corresponding to any form of “test locations.” Merely teaching test case sets, without more, is not enough to teach or suggest test locations. Thus, it is believed that *Hare* does not teach or suggest “flows respectively corresponding to test locations.” *Binder* is not relied upon nor do its cited portions teach such limitations. Thus, the combination fails to teach “flows respectively corresponding to test locations.”

Claim 3 also recites “a graphical end user interface (GUI) via which an end user constructs a graphical model for a multi-location test of a network.” The combination does not teach these limitations because the cited art does not teach “an end user constructs a graphical model for a multi-location test of a network.” The OA appears to interpret *Binder*’s Application Model Builder 8 as meeting these limitations. *See* OA p.5 (referring to the reasoning used to reject claim 1, which cites to *Binder* Figure 1, element 8, paragraph [0021]). Applicant respectfully disagrees, noting that while *Binder*’s Application Model Builder 8 provides many modeling capabilities (*see Binder* para. [0021]), *Binder* is silent to any of such models being “for a multi-location test of a network.” *Hare* is not relied upon to teach these limitations nor is Applicant able to find any aspect of the cited portions as teaching these limitations. Thus, the cited art fails to teach or suggest all claim limitations. Therefore, Applicant respectfully requests that the rejection be withdrawn.

Claims 4-5 depend from and inherit all the features of claim 3. As discussed above, *Hare* and *Binder* fail to teach or suggest all the limitations of claim 3. Thus, the cited art fails to teach or suggest all the limitations of claims 4-5. Therefore Applicant respectfully requests that the rejection be withdrawn.

C. Claim 18

Claim 18 recites “a graphical end user interface via which an end user designs a graphical model of multi-location test software, in which a subtest of at least one software module is constructed for each test location.” The combination does not teach these limitations because the combination fails to teach “a graphical model of multi-location test software.” The OA admits *Hare* does not teach these limitations and interprets *Binder*’s disclosure of Application Model Builder 8 as meeting these limitations. *Binder* teaches “Application Model Builder 8 is used to develop an integrated model of application user behavior, required application behavior, application user profiles, application user input domains, application interfaces, and load profiles, and so on.” *Binder* para. [0021]. Hence, while *Binder* teaches graphical models of behavior, profiles, input domains, and interfaces, *Binder* is silent to graphical models of test software. Further, *Binder*’s Application Model Builder 8 provides many modeling capabilities (see *Binder* para. [0021]), yet *Binder* is silent to any of such models being “of multi-location test software.” *Hare* is not relied upon to teach these limitations nor is Applicant able to find any aspect of the cited portions as teaching these limitations. Thus, the cited art fails to teach or suggest all claim limitations. Therefore, Applicant respectfully requests that the rejection be withdrawn.

VI. Third ground of rejection -- under 35 U.S.C. § 103(a) over *Hare* in view of *Binder* and *Schwaller*

Claims 6-10 and 19 stand rejected under 35 U.S.C. § 103(a) over *Hare* in view of *Binder* and *Schwaller*. Applicant hereby traverses the rejection.

A. Claims 6-10

Claims 6-10 depend from and inherit all the features of claim 3. As discussed above, *Hare* and *Binder* fail to teach or suggest all the limitations of claim 3. *Schwaller* is not relied upon nor do its cited portions teach or suggest such features. Thus, the cited art fails to teach or suggest all the limitations of claims 6-10. Therefore Applicant respectfully requests that the rejection be withdrawn.

B. Claim 19

Claim 19 stands rejected under 35 U.S.C. 103(a) as being unpatentable over *Hare* in view of *Binder* and *Schwaller*. Under 37 C.F.R. § 1.104(a)(2), the reasons for any adverse action are to be stated in an Office action. Appellant respectfully notes the OA fails to provide any reasoning for the rejection of claim 19 within this ground of rejection. *See* OA pp. 6-8 (stating that claim 19 is rejected under this ground (p.6), but failing to provide any reasoning). As such, the reasons for the rejection were not stated in the OA, in violation of § 1.104(a)(2). Should the Office persist in the rejection, clarification is respectfully requested. Nevertheless, Applicant hereby traverses the rejection as best as Applicant understands it, looking at the other rejection of claim 19 to provide context and insight where common art is involved.

Claim 19 recites “a graphical end user interface to design a graphical model of software to test multiple test locations of a network.” The combination does not teach these limitations because the cited art does not teach “software to test multiple test locations.” The OA appears to interpret *Binder*’s Application Model Builder 8 as meeting these limitations. *See* OA p.10 (referring to the reasoning used to reject claim 1, which cites to *Binder* Figure 1, element 8, paragraph [0021]). Applicant respectfully disagrees, noting that while *Binder*’s Application Model Builder 8 provides many modeling capabilities (*see Binder* para. [0021]), *Binder* is silent to any of such models testing “multiple test locations of a network.” Should the Office persist in this rejection, clarification is respectfully requested. *Hare* and *Schwaller* are not relied upon nor do their cited portions teach such limitations.

Claim 19 also recites “software modules, including … coordination modules” that “coordinate inter-operation of test modules in different flows and communicate test generated data with the different flows.” The combination does not teach these limitations for at least two reasons. First, the ‘model’ of *Schwaller* does not teach or suggest the claimed ‘module,’ as explained below. The OA admits *Hare* and *Binder* do not teach these limitations and appears to interpret *Schwaller*’s transaction model as meeting the claim’s “coordination modules.” OA pp. 6 & 10 (referring to the reasoning used in the rejection of claim 6). A software module is “[a] program unit that is discrete and identifiable with respect to compiling, combining with other

units, and loading.” IEEE, “IEEE 100 The Authoritative Dictionary of IEEE Standards Terms” p.703 (7th ed. 2000) (under “module (2) (A) (software)”). *Schwaller* teaches the transaction model merely defines “the beginning and ending reference point for a transaction timing measurement,” yet is silent to the transaction model being any form of a program unit.

Second, *Schwaller* fails to teach coordination modules that “communicate test generated data with the different flows.” The OA admits *Hare* and *Binder* do not teach these limitations and appears to interpret *Schwaller*’s transaction model as meeting the claim’s “coordination modules.” OA pp. 6 & 10 (referring to the reasoning used in the rejection of claim 6). *Schwaller* teaches the transaction model merely defines “the beginning and ending reference point for a transaction timing measurement” (*Schwaller* Abstract), yet is silent to the transaction model communicating any form of data, much less test generated data.

Claim 19 also recites “at least one agent to run the flows; at least one probe deployed at each test location to collect data from at least one attribute of the network and communicate the data with the at least one agent; and a central controller to control running of the flows and collect the data from the at least one agent.” Applicant has looked at the other rejection of claim 19 for context and believes that the rejection most likely relies upon *Hare* to teach or suggest this feature. Applicant respectfully disagrees because even if, *arguendo*, *Hare*’s probe points 46 were interpreted as meeting the claim’s “at least one probe,” *Hare* would fail to teach “at least one probe ... to collect data from at least one attribute of the network” because *Hare*’s probe points 46 do not collect data. Rather, *Hare* teaches probe points 46 are outputs connected to various sub-systems of the ACD system, yet is silent to probe points 46 collecting data. *Hare* col. 3, ll. 29-55. The cited portions of *Binder* and *Schwaller* also fail to teach these limitations.

Thus, the cited art fails to teach or suggest all claim limitations. Therefore, Applicant respectfully requests that the rejection be withdrawn.

VII. Fourth ground of rejection – under 35 U.S.C. § 103(a) over *Hare* in view of *Binder*, *Schwaller*, and *Hartman*

Claims 11-16 stand rejected under 35 U.S.C. § 103(a) over *Hare* in view of *Binder* and *Hartman*. Claims 11-16 depend from and inherit all the features of claim 3. As discussed above, *Hare* and *Binder* fail to teach or suggest all the limitations of claim 3. *Hartman* is not relied upon nor do its cited portions teach or suggest such features. Thus, the cited art fails to teach or suggest all the limitations of claims 11-16. Therefore Applicant respectfully requests that the rejection be withdrawn.

VIII. Fifth ground of rejection – under 35 U.S.C. § 103(a) over *Hare* in view of *Binder*, *Schwaller*, and *Hartman*

Claims 17 and 19-20 stand rejected under 35 U.S.C. § 103(a) over *Hare* in view of *Binder*, *Schwaller*, and *Hartman*. Applicant notes the rejection of claims 17 and 19-20 over *Hare*, *Binder* and *Hartman* incorporates reasoning relying upon *Schwaller*. Thus, Applicant has interpreted the rejection of claims 17 and 19-20 over *Hare* in view of *Binder* and *Hartman* as being over *Hare* in view of *Binder*, *Schwaller*, and *Hartman*. Applicant hereby traverses the rejection.

A. Claim 17

Claim 17 recites “software modules, including . . . coordination modules” that “coordinate inter-operation of test modules in different flows.” The combination does not teach these limitations at least because the ‘model’ of *Schwaller* does not teach or suggest the claimed ‘module,’ as explained below. The OA admits *Hare* and *Binder* do not teach these limitations and appears to interpret *Schwaller*’s transaction model as meeting the claim’s “coordination modules.” OA pp. 6 & 10 (referring to the reasoning used in the rejection of claim 6). A software module is “[a] program unit that is discrete and identifiable with respect to compiling, combining with other units, and loading.” IEEE, “IEEE 100 The Authoritative Dictionary of IEEE Standards Terms” p.703 (7th ed. 2000) (under “module (2) (A) (software)”). *Schwaller* teaches the transaction model merely defines “the beginning and ending reference point for a transaction timing measurement” (*Schwaller* Abstract), yet is silent to the transaction model

being any form of a program unit. *Hartman* is not relied upon nor do its cited portions teach such limitations.

Claim 17 also recites “a graphical end user interface (GUI) via which an end user constructs a graphical model for a multi-location test of a network.” The combination does not teach these limitations because the cited art does not teach “an end user constructs a graphical model for a multi-location test of a network.” The OA appears to interpret *Binder*’s Application Model Builder 8 as meeting these limitations. *See* OA p.10 (referring to the reasoning used to reject claim 1, which cites to *Binder* Figure 1, element 8, paragraph [0021]). Applicant respectfully disagrees, noting that while *Binder*’s Application Model Builder 8 provides many modeling capabilities (*see Binder* para. [0021]), *Binder* is silent to any of such models being “for a multi-location test of a network.” *Schwaller* and *Hartman* are not relied upon to teach these limitations nor is Applicant able to find any aspect of the cited portions teaching these limitations. Thus, the cited art fails to teach or suggest all claim limitations. Therefore, Applicant respectfully requests that the rejection be withdrawn.

B. Claim 19

Claim 19 recites “a graphical end user interface to design a graphical model of software to test multiple test locations of a network.” The combination does not teach these limitations because the cited art does not teach “software to test multiple test locations.” The OA appears to interpret *Binder*’s Application Model Builder 8 as meeting these limitations. *See* OA p.10 (referring to the reasoning used to reject claim 1, which cites to *Binder* Figure 1, element 8, paragraph [0021]). Applicant respectfully disagrees, noting that while *Binder*’s Application Model Builder 8 provides many modeling capabilities (*see Binder* para. [0021]), *Binder* is silent to any of such models testing “multiple test locations of a network.” Should the Office persist in this rejection, clarification is respectfully requested. *Hare*, *Schwaller*, and *Hartman* are not relied upon nor do their cited portions teach such limitations.

Claim 19 also recites “software modules, including . . . coordination modules” that “coordinate inter-operation of test modules in different flows and communicate test generated

data with the different flows.” The combination does not teach these limitations for at least two reasons. First, the ‘model’ of *Schwaller* does not teach or suggest the claimed ‘module,’ as explained below. The OA admits *Hare* and *Binder* do not teach these limitations and appears to interpret *Schwaller*’s transaction model as meeting the claim’s “coordination modules.” OA pp. 6 & 10 (referring to the reasoning used in the rejection of claim 6). A software module is “[a] program unit that is discrete and identifiable with respect to compiling, combining with other units, and loading.” IEEE, “IEEE 100 The Authoritative Dictionary of IEEE Standards Terms” p.703 (7th ed. 2000) (under “module (2) (A) (software)”). *Schwaller* teaches the transaction model merely defines “the beginning and ending reference point for a transaction timing measurement,” yet is silent to the transaction model being any form of a program unit. *Hartman* is not relied upon nor do its cited portions teach such limitations.

Second, *Schwaller* fails to teach coordination modules that “communicate test generated data with the different flows.” The OA admits *Hare* and *Binder* do not teach these limitations and appears to interpret *Schwaller*’s transaction model as meeting the claim’s “coordination modules.” OA pp. 6 & 10 (referring to the reasoning used in the rejection of claim 6). *Schwaller* teaches the transaction model merely defines “the beginning and ending reference point for a transaction timing measurement” (*Schwaller* Abstract), yet is silent to the transaction model communicating any form of data, much less test generated data. *Hartman* is not relied upon nor do its cited portions teach such limitations.

Claim 19 also recites “at least one agent to run the flows; at least one probe deployed at each test location to collect data from at least one attribute of the network and communicate the data with the at least one agent; and a central controller to control running of the flows and collect the data from the at least one agent.” Though it is difficult to tell, Applicant believes that the rejection most likely relies upon *Hare* to teach or suggest this feature. Applicant respectfully disagrees because even if, *arguendo*, *Hare*’s probe points 46 were interpreted as meeting the claim’s “at least one probe,” *Hare* would fail to teach “at least one probe … to collect data from at least one attribute of the network” because *Hare*’s probe points 46 do not collect data. Rather, *Hare* teaches probe points 46 are outputs connected to various sub-systems of the ACD system,

yet is silent to probe points 46 collecting data. *Hare* col. 3, ll. 29-55. The cited portions of *Binder*, *Schwaller*, and *Hartman* also fail to teach these limitations.

Thus, the cited art fails to teach or suggest all claim limitations. Therefore, Applicant respectfully requests that the rejection be withdrawn.

C. Claim 20

Claim 20 recites “software modules, including . . . coordination modules.” The combination does not teach these limitations at least because the ‘model’ of *Schwaller* does not teach or suggest the claimed ‘module,’ as explained below. The OA admits *Hare* and *Binder* do not teach these limitations and appears to interpret *Schwaller’s* transaction model as meeting the claim’s “coordination modules.” OA pp. 6 & 10 (referring to the reasoning used in the rejection of claim 6). A software module is “[a] program unit that is discrete and identifiable with respect to compiling, combining with other units, and loading.” IEEE, “IEEE 100 The Authoritative Dictionary of IEEE Standards Terms” p.703 (7th ed. 2000) (under “module (2) (A) (software)”). *Schwaller* teaches the transaction model merely defines “the beginning and ending reference point for a transaction timing measurement” (*Schwaller* Abstract), yet is silent to the transaction model being any form of a program unit. *Hartman* is not relied upon nor do its cited portions teach such limitations.

Claim 20 also recites “coordinating synchronization and exchange of test generated data between flows.” The combination fails to teach these limitations at least because *Schwaller* fails to teach coordination modules that “communicate test generated data with the different flows.” The OA admits *Hare* and *Binder* do not teach these limitations and appears to interpret *Schwaller’s* transaction model as meeting the claim’s “coordination modules.” OA pp. 6 & 10 (referring to the reasoning used in the rejection of claim 6). *Schwaller* teaches the transaction model merely defines “the beginning and ending reference point for a transaction timing measurement,” yet is silent to the transaction model exchanging any form of test generated data. *Hartman* is not relied upon nor do its cited portions teach such limitations. Thus, the cited art

fails to teach or suggest all claim limitations. Therefore, Applicant respectfully requests that the rejection be withdrawn.

Claim 20 also recites “controlling an agent to receive and analyze the text representation, access the library, and run the flows for each test location.” The cited portions of *Hare*, *Binder*, *Schwaller*, and *Hartman* do not teach such limitations. As an example, *Hare* fails to teach the claim’s “agent” because *Hare* teaches agents are operators (i.e., actual people) to whom calls are forwarded from agent ACD system 26 and that have discussions with calling parties (*Hare* col. 2, ll. 56-63), yet *Hare* is silent to such agents or operators accessing software libraries or running flows. The cited portions of *Binder*, *Schwaller*, and *Hartman* also fail to teach these limitations. Hence, the combination fails to teach “controlling an agent to receive and analyze the text representation, access the library, and run the flows for each test location.” Thus, the cited art fails to teach or suggest all claim limitations. Therefore, Applicant respectfully requests that the rejection be withdrawn.

CONCLUSION

In view of the above, applicant believes the pending application is in condition for allowance.

Applicant believes a fee of \$250.00 is due with this response. Please charge Deposit Account No. 50-1078, under Order No. 10030721-1 from which the undersigned is authorized to draw for any fee due with this response.

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4).

Dated: September 5, 2007

Typed Name: Cathey Davis

Signature: 

Respectfully submitted,

By: Thomas L. Kelton

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